

EXHIBIT A
PENDING CLAIMS
FOR U.S. SERIAL NO. 08/726,211 (UTXC:504)


1. A composition comprising a first antisense polynucleotide that hybridizes to a second, Bcl-2-encoding polynucleotide under intracellular conditions and a neutral lipid associated with said first polynucleotide, to form a Bcl-2 polynucleotide/neutral lipid association, wherein said first polynucleotide comprises at least 8 nucleotides of the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1), wherein said polynucleotide is complementary to the translation initiation site of Bcl-2.

2. The composition of claim 1, wherein said first polynucleotide is an oligonucleotide having a length of between about 8 and about 50 bases.
3. The composition of claim 1, wherein the first polynucleotide is complementary to the translation initiation site of Bcl-2 mRNA.
4. The composition of claim 3, wherein the polynucleotide is an oligonucleotide comprising the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1).
5. The composition of claim 1, comprising a liposome formed from the lipid.
6. The composition of claim 5, wherein the first polynucleotide is encapsulated in the liposome.
7. The composition of claim 1, wherein the lipid is a phosphatidylcholine, a phosphatidylglycerol, or a phosphatidylethanolamine.
8. The composition of claim 7, wherein the lipid is dioleoylphosphatidylcholine.

- EA
9. A composition comprising an expression construct that encodes a first antisense polynucleotide that hybridizes to a second, Bcl-2-encoding polynucleotide under intracellular conditions, wherein said construct is under the control of a promoter that is active in eukaryotic cells and associated with a neutral lipid, wherein said first polynucleotide comprises at least 8 nucleotides of the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1), wherein said polynucleotide is complementary to the translation initiation site of Bcl-2.
10. A method of inhibiting proliferation of a Bcl-2-associated disease cell comprising obtaining a first polynucleotide that hybridizes to a second polynucleotide under intracellular conditions, mixing the first polynucleotide with a neutral lipid to form a composition comprising a polynucleotide/lipid association, and administering said association to said Bcl-2-associated disease cell to inhibit the proliferation of said disease cell, wherein said cell has a t(14;18) translocation, and wherein the second polynucleotide comprises at least 8 bases of the translation initiation site of Bcl-2 mRNA.
11. The method of claim 10, wherein the cell is a cancer cell.
12. The method of claim 11, wherein said cancer cell is a follicular lymphoma cell.
13. The method of claim 10, wherein said first polynucleotide is an oligonucleotide having a length of between about 8 and about 50 bases.
14. The method of claim 10, comprising a liposome formed from the lipid.
15. The method of claim 14, wherein the liposome encapsulates the first polynucleotide.
16. The method of claim 10, wherein said administering takes place in an animal.

17. The method of claim 16, wherein said animal is a human.
18. The method of claim 17, wherein said composition is delivered to said human in a volume of 0.50-10.0 ml per dose.
19. The method of claim 17, wherein said composition is delivered to said human in an amount of from about 5 to about 30 mg polynucleotide per m².
20. The method of claim 19, wherein said composition is administered three times per week for eight weeks.
21. A method of inhibiting proliferation of a Bcl-2-associated disease cell having a t(14;18) translocation comprising:
 - (a) obtaining an oligonucleotide of from about 8 to about 50 bases and complementary to at least 8 consecutive bases of the translation initiation site of Bcl-2 mRNA;
 - (b) mixing the oligonucleotide with a neutral lipid to form a neutral oligonucleotide/lipid association; and
 - (c) administering said association to said Bcl-2-associated disease cell to inhibit the proliferation of said disease cell.
22. The method of claim 21, wherein the cell is a cancer cell.
23. The method of claim 22, wherein said cancer cell is a follicular lymphoma cell.
24. The method of claim 21, comprising a liposome formed from the lipid.
25. The method of claim 24, wherein the liposome encapsulates the polynucleotide.
26. The method of claim 21, wherein said administering takes place in an animal.

27. The method of claim 26, wherein said animal is a human.
28. The method of claim 27, wherein said composition is delivered to said human in a volume of 0.50-10.0 ml per dose.
29. The method of claim 27, wherein said composition is delivered to said human in an amount of from about 5 to about 30 mg polynucleotide per m².
30. The method of claim 29, wherein said composition is administered three times per week for eight weeks.



31. A neutral lipid oligonucleotide association comprising a neutral lipid associated with an antisense oligonucleotide of from about 8 to about 50 bases and complementary to the translation initiation site of Bcl-2 mRNA, wherein said translation initiation site comprises the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1).

32. The neutral lipid oligonucleotide association of claim 31, wherein the oligonucleotide has the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1).
33. The neutral lipid oligonucleotide association of claim 31, comprising a liposome formed from the lipid.
34. The neutral lipid oligonucleotide association of claim 33, wherein the oligonucleotide is encapsulated in the liposome.
35. The neutral lipid oligonucleotide association of claim 31, wherein the lipid is a phosphatidylcholine, a phosphatidylglycerol, or a phosphatidylethanolamine.

36. The neutral lipid oligonucleotide association of claim 35, wherein the lipid is dioleoylphosphatidylcholine.
37. A composition comprising a neutral lipid associated with an expression construct that encodes an oligonucleotide of from about 8 to about 50 bases and complementary to at least 8 bases of the translation initiation site of Bcl-2 mRNA, wherein the construct is under the control of a promoter that is active in eukaryotic cells.
38. The composition of claim 1, wherein said first polynucleotide is a P-ethoxy oligonucleotide.
39. The composition of claim 5, wherein said liposome consists essentially of neutral lipids.
40. The composition of claim 9, comprising a liposome formed from said neutral lipid.
41. The composition association of claim 40, wherein said liposome consists essentially of neutral lipids.
43. The method of claim 10, wherein said first polynucleotide is a P-ethoxy oligonucleotide.
44. The method of claim 14, wherein said liposome consists essentially of neutral lipids.
45. The method of claim 21, wherein said first oligonucleotide is a P-ethoxy oligonucleotide.
46. The method of claim 24, wherein said liposome consists essentially of neutral lipids.

47. The neutral lipid oligonucleotide association of claim 31, wherein said first oligonucleotide is a P-ethoxy oligonucleotide.
48. The neutral lipid oligonucleotide association of claim 33, wherein said liposome consists essentially of neutral lipids.
49. The composition of claim 37, comprising a liposome formed from the lipid.
50. The composition of claim 49, wherein said liposome consists essentially of neutral lipids.

52. A composition comprising a first antisense polynucleotide that hybridizes to a second, Bcl-2-encoding polynucleotide under intracellular conditions and a primary phosphatide associated with said first polynucleotide, wherein said primary phosphatide is a neutral lipid, and wherein said first polynucleotide comprises at least 8 nucleotides of the sequence CAGCGTGCGCCATCCTTC (SEQ ID NO:1), and wherein said polynucleotide is complementary to the translation initiation site of Bcl-2.

53. The composition of claim 52, comprising a liposome formed from the primary phosphatide.
54. The composition of claim 53, wherein said liposome consists essentially of neutral lipids.
55. The composition association of claim 52, wherein said first polynucleotide is a P-ethoxy oligonucleotide.

56. The composition of claim 1, wherein said at least 8 nucleotides are consecutive nucleotides.